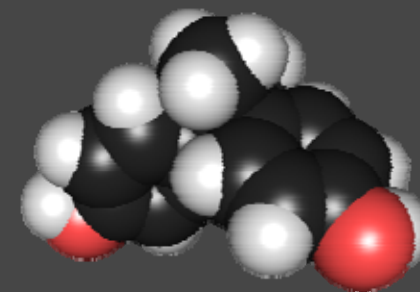


US EPA ARCHIVE DOCUMENT



# BINATIONAL MONITORING AND SURVEILLANCE OF CRITICAL SUBSTANCES AND PRIORITY TOXICS

“Chemicals of Emerging Concern Screening”

Great Lakes Binational Toxics Strategy  
Integration Workshop  
Chicago IL  
1 December 2010

BETH SEAN  
MURPHYBACKUS

M&S WORKGROUP

GREAT LAKES



# OUTLINE

- **Goals/Objectives**
- **Terms of Reference**
- **Program Representation**
  - **Canada**
  - **US**
- **Environmental Stewardship (Client)**
- **Science + Technology**
- **Coordination – Integration**
- **Cooperation**

**Monitoring and  
Surveillance  
Workgroup – Update**

**Setting the new  
“baseline”**

# GOALS/OBJECTIVES

- Provide a binational forum to communicate Program workplans and outcomes;
- Seek areas of potential cooperation, integration, and coordination;
- Exchange information and knowledge on potential future toxic chemicals for consideration (early warning/forecasting);
- Investigate potential for the integration of multi-media results at an ecosystem level;
- Identify areas for potential specific, focused studies;
- Identify opportunities with the Cooperative Science and Monitoring Initiative (CSMI).

# TERMS OF REFERENCE

- Informal Group
  - Formalization in future
  - Co-Chaired by EPA-GLNPO and EC-WQMSD
- Meet Annually
  - Alternate site between US & Canada
  - Potential meeting at scientific conference(s)
- Membership
  - US EPA Award Principal Investigators & EPA support staff
  - USGS
  - Environment Canada Program Scientists

# POTENTIAL NAMES

- $\begin{array}{c} \text{C} \\ | \\ \text{Gl} = \text{E} - \text{C} \\ | \\ \text{C} \end{array}$  Great Lakes Emerging Contaminant Chemistry Consortium (GLEC<sup>3</sup>)
- Emerging Surveillance Project for the International Assessment of the great Lakes (ESPIAL)
- Great lakes Environmental Emerging Contaminant Surveillance (GEECS)
- Binational Organization for Great Lakes Emerging contaminants (BOGLE)



# PROGRAM REPRESENTATION

- Environment Canada
  - Water Science – Water Quality Monitoring and Surveillance
    - Great Lakes Surveillance Program, Great Lakes Fish Contaminants Monitoring and Surveillance, Great Lakes Pesticides Surveillance, Toxics Monitoring, Great Lakes Precipitation Network, Connecting Channels Monitoring and Surveillance, Canadian Aquatic Biomonitoring Network (CABIN), Cooperative Science and Monitoring Initiative (CSMI)
  - Wildlife and Landscape Science
    - Great Lakes Herring Gull Program
  - Air Science
    - Integrated Atmospheric Deposition Network (IADN)
  - Research
    - Priority Substance Exposure, Wildlife Toxicology



# PROGRAM REPRESENTATION

- United States Environmental Protection Agency
  - Great Lakes National Program Office (GLNPO)
    - Cooperative Science and Monitoring Initiative (CSMI)
    - Integrated Atmospheric Deposition Network (IADN) – Indiana University
    - Great Lakes Fish Monitoring and Surveillance Program – Clarkson University
    - Sediment Monitoring - University of Illinois at Chicago
- USGS
  - Tributary Monitoring Program

## MULTI-MEDIA

Moving to a more comprehensive and integrated environmental monitoring system;



# ENVIRONMENTAL STEWARDSHIP

## ■ CANADA

- Lakewide Management Plans (LaMPs)
- Risk Assessment
- Risk Management
- Binational Toxics Strategy
- Ecosystem Indicators
- National Coordination (CMP)

## ■ UNITED STATES

- Lakewide Management Plans (LaMPs)
- Binational Toxics Strategy
- Ecosystem Indicators
- Office of Pollution Prevention and Toxics (OPPT)

**CLIENT FOCUS**  
Information Exchange – Priority Setting

# SCIENCE + TECHNOLOGY

To better understand the changing state of the environment it is important to expand the lists of environmental parameters to be measured with greater spatial and temporal resolution. In order to deliver high-quality knowledge, information and data that enable decision makers, we need to;

- **Make effective use of resources – people and technology;**
- **Explore technological innovation (new methods);**
- **Coordinate technological tools (instrumentation, field equipment, in-situ samplers)**

## Technology : Innovation

Creation of a technology hub to drive innovation, monitoring, surveillance and research

LEGACY • EMERGED •  
EMERGING • RE-EMERGING

# COORDINATION - INTEGRATION

- Mercury / Organochlorines / PCBs
- Bisphenol A (BPA)
- Hexabromocyclododecane (HBCD)
- Long-chain perfluorinated chemicals (PFCs)
- PBDEs
- Siloxanes
- Chlorinated Paraffins

**Continue to coordinate monitoring and surveillance on critical substances and priority toxics**

**Continue to proactively identify emerging substances in sensitive species as part of an early warning system.**

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EMERGING • RE-EMERGING**

# COOPERATION - CSMI

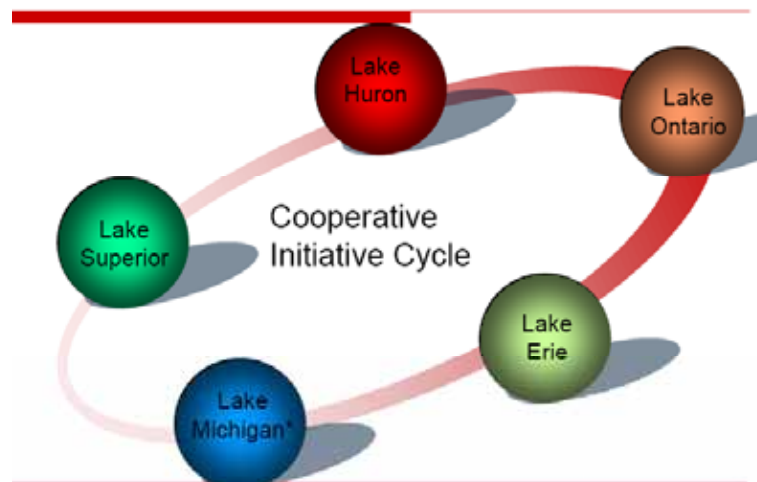


## Cooperative Science and Monitoring Initiative (Superior):

- Emerging Contaminants Matrix
- Cooperation on Method Development
- Interlaboratory Comparison Study
- Sample Sharing
- Capacity Building
- Joint Publications/Science Integration
- Engaging Partners (OGD, Prov., State, etc.)

Optimizing Opportunities.

## Rotational Cycle





Questions ?

Binational monitoring and surveillance of critical substances and priority toxics

**“Chemicals of Emerging Concern Screening”**